

Claims

1. A polypeptide selected from the group consisting of:
 - a) polypeptides comprising a fragment of at least 18 amino acids of the amino acid sequence as shown in SEQ ID NO:1;
 - b) polypeptides comprising an amino acid sequence which has an identity of at least 70% to the amino acid sequence as shown in SEQ ID NO:1;
 - c) polypeptides comprising a fragment of the amino acid sequence as shown in SEQ ID NO:1 wherein said fragment is capable of binding to IgE antibodies from an individual being allergic against mugwort pollen; and
 - d) polypeptides consisting of a fragment of at least 7 amino acids of the amino acid sequence as shown in SEQ ID NO:1.
2. A polypeptide according to claim 1 comprising the amino acid sequence as shown in SEQ ID NO:1.
3. A polypeptide according to claim 1 or 2 characterized in that it is capable of binding to IgE antibodies from an individual being allergic against ragweed pollen.
4. A polynucleotide selected from the group consisting of
 - a) polynucleotides encoding the amino acid sequence as shown in SEQ ID NO:1;
 - b) polynucleotides encoding a polypeptide as claimed in any one of claims 1 to 3; and
 - c) polynucleotides comprising a nucleotide sequence which has an identity of at least 75 % to the nucleotide sequence as shown in SEQ ID NO:2;or the complementary strand of such polynucleotide.

5. A polynucleotide according to claim 4 comprising the nucleotide sequence as shown in SEQ ID NO:2 or the nucleotide sequence as shown in SEQ ID NO:3.
6. A plasmid or a vector comprising a polynucleotide as claimed in claim 4 or 5.
7. A cell containing a plasmid or a vector as claimed in claim 6 and/or a polynucleotide as claimed in claim 4 or 5.
8. A cell according to claim 7 which is selected from the group consisting of plant cells, bacterial cells and yeast cells.
9. A process for the preparation of a polypeptide as claimed in any one of claims 1 to 3 comprising the step of culturing cells as claimed in claim 7 or 8 under conditions appropriate for the expression of the polypeptide and optionally subsequently recovering the polypeptide.
10. A process according to claim 9 wherein the cells are opened and the polypeptide is recovered using affinity chromatography.
11. An antibody capable of binding to a polypeptide as claimed in any one of claims 1 to 3.
12. An antibody according to claim 11 which is capable of binding to one or several of the polypeptides selected from the group consisting of Amb a I.1, Amb a I.2, Amb a I.3 and Amb a 2.
13. An antibody according to claim 11 which does not bind to any one of the polypeptides selected from the group consisting of Amb a I.1, Amb a I.2, Amb a I.3 and Amb a 2.
14. A pharmaceutical composition comprising a polypeptide as claimed in any one of claims 1 to 3 and/or a polynucleotide as claimed in claim 4 or 5 and/or an antibody as claimed in any one of claims 11 to 13.

15. The use of a polypeptide as claimed in any one of claims 1 to 3 or a polynucleotide as claimed in claim 4 or 5 or an antibody as claimed in any one of claims 11 to 13 for the preparation of a medicament for the treatment or the prevention or the diagnosis of an allergic disorder.

16. A use according to claim 15 wherein the medicament is administered to an individual to be desensitized.

17. A kit useful for the diagnosis, the treatment and/or the prevention of an allergic disorder comprising a polypeptide as claimed in any one of claims 1 to 3 and/or a polynucleotide as claimed in claim 4 or 5 and/or an antibody as claimed in any one of claims 11 to 13.